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OM protein - protein search, using sw model

Run on: November 10, 2004, 19:42:13 ; Search time 94.5 Seconds
(without alignments)
284.076 Million cell updates/sec

Title: US-09-882-434A-21

Perfect score: 427

Sequence: 1 SFTVWSGPGCNRNRRYSK.....FGSSARACNPFQWKSIPIQC 76

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1566620 seqs, 353225886 residues

Total number of hits satisfying chosen parameters: 1566620

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published Applications_AA*

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1: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep.*
2: /cgn2_6/ptodata/1/pubpaa/PCT_NEW_PUB.pep.*
3: /cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep.*
4: /cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB.pep.*
5: /cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep.*
6: /cgn2_6/ptodata/1/pubpaa/PCTUS_PUBCOMB.pep.*
7: /cgn2_6/ptodata/1/pubpaa/US08_NEW_PUB.pep.*
8: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep.*
9: /cgn2_6/ptodata/1/pubpaa/US09A_PUBCOMB.pep.*
10: /cgn2_6/ptodata/1/pubpaa/US09B_PUBCOMB.pep.*
11: /cgn2_6/ptodata/1/pubpaa/US09C_PUBCOMB.pep.*
12: /cgn2_6/ptodata/1/pubpaa/US09_NEW_PUB.pep.*
13: /cgn2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pep.*
14: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep.*
15: /cgn2_6/ptodata/1/pubpaa/US10C_PUBCOMB.pep.*
16: /cgn2_6/ptodata/1/pubpaa/US10D_PUBCOMB.pep.*
17: /cgn2_6/ptodata/1/pubpaa/US10_NEW_PUB.pep.*
18: /cgn2_6/ptodata/1/pubpaa/US11_NEW_PUB.pep.*
19: /cgn2_6/ptodata/1/pubpaa/US60_NEW_PUB.pep.*
20: /cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pep.*

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	427	100.0	76	9 US-09-882-434A-21	Sequence 21, Appl
2	423	99.1	76	9 US-09-882-434A-19	Sequence 19, Appl
3	421	98.6	76	9 US-09-882-434A-17	Sequence 17, Appl
4	420	98.4	76	9 US-09-882-434A-20	Sequence 20, Appl
5	417	97.7	102	9 US-09-882-434A-1	Sequence 1, Appl
6	416	97.4	76	9 US-09-882-434A-18	Sequence 18, Appl
7	413	96.7	76	9 US-09-882-434A-15	Sequence 15, Appl
8	413	96.7	76	9 US-09-882-434A-16	Sequence 16, Appl
9	168.5	39.5	116	17 US-10-425-115-251061	Sequence 251061,
10	81.5	19.1	500	15 US-10-424-599-214772	Sequence 214772,
11	72	16.9	68	17 US-10-425-115-303206	Sequence 303206,
12	72	16.9	174	15 US-10-424-599-253846	Sequence 253846,
13	71.5	16.7	486	9 US-09-801-368-154	Sequence 154, Appl

14	71.5	16.7	486	14	US-10-369-493-21896	Sequence 21896, A
15	71	16.6	135	14	US-10-091-135-83	Sequence 83, Appl
16	71	16.6	557	14	US-10-369-493-3800	Sequence 3800, Ap
17	68.5	16.0	1557	14	US-10-369-493-6816	Sequence 6816, Ap
18	68.5	16.0	1690	14	US-10-184-644-449	Sequence 449, App
19	68.5	16.0	1690	14	US-10-184-644-449	Sequence 449, App
20	68	15.9	485	14	US-10-369-493-21893	Sequence 21893, A
21	67.5	15.8	585	9	US-09-841-132-337	Sequence 337, App
22	67.5	15.8	1174	14	US-10-123-155-271	Sequence 271, App
23	67.5	15.8	1174	14	US-10-146-731-271	Sequence 271, App
24	67.5	15.8	1174	14	US-10-140-472-271	Sequence 271, App
25	67.5	15.8	1174	14	US-10-141-761-271	Sequence 271, App
26	67.5	15.8	1174	14	US-10-142-885-271	Sequence 271, App
27	67.5	15.8	1174	14	US-10-158-790-271	Sequence 271, App
28	67.5	15.8	1174	14	US-10-137-871-271	Sequence 271, App
29	67.5	15.8	1174	14	US-10-140-923-271	Sequence 271, App
30	67.5	15.8	1174	14	US-10-141-756-271	Sequence 271, App
31	67.5	15.8	1174	14	US-10-141-759-271	Sequence 271, App
32	67.5	15.8	1174	14	US-10-140-805-271	Sequence 271, App
33	67.5	15.8	1174	14	US-10-140-864-271	Sequence 271, App
34	67.5	15.8	1174	15	US-10-142-426-271	Sequence 271, App
35	67.5	15.8	1752	9	US-09-841-132-180	Sequence 180, App
36	67	15.7	2628	15	US-10-038-854-40	Sequence 40, Appl
37	67	15.7	2715	15	US-10-042-865-52	Sequence 52, Appl
38	67	15.7	2715	15	US-10-029-020-51	Sequence 51, Appl
39	67	15.7	2721	15	US-10-038-854-38	Sequence 38, Appl
40	67	15.7	2725	15	US-10-038-854-36	Sequence 36, Appl
41	66.5	15.6	7285	14	US-10-145-206-28	Sequence 28, Appl
42	66	15.5	92	16	US-10-437-963-184834	Sequence 184834, A
43	66	15.5	146	16	US-10-767-701-60832	Sequence 60832, A
44	66	15.5	856	14	US-10-231-778-221	Sequence 221, App
45	66	15.5	880	15	US-10-425-114-72833	Sequence 72833, A

ALIGNMENTS

RESULT 1

```

US-09-882-434A-21
; Sequence 21, Application US/09882434A
; Patent No. US20020108144A1
; GENERAL INFORMATION:
; APPLICANT: Manners, John M.
; APPLICANT: Marcus, John Paul
; APPLICANT: Goulter, Kenneth C.
; APPLICANT: Green, Jodie Lyn
; TITLE OF INVENTION: ANTI-MICROBIAL PROTEIN
; FILE REFERENCE: CULIN18.1CPICI
; CURRENT APPLICATION NUMBER: US/09/882,434A
; CURRENT FILING DATE: 2001-06-15
; PRIOR APPLICATION NUMBER: 09/364395
; PRIOR FILING DATE: 1999-07-30
; PRIOR APPLICATION NUMBER: 09/117615
; PRIOR FILING DATE: 1998-11-09
; PRIOR APPLICATION NUMBER: PCT/AU97/00052
; PRIOR FILING DATE: 1997-01-31
; PRIOR APPLICATION NUMBER: AU PN 7802
; PRIOR FILING DATE: 1996-01-31
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 21
; LENGTH: 76
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: M146K/54K variant. Variant M146K protein
; OTHER INFORMATION: M146K/54K containing a Lysine at amino acid 46 and
; OTHER INFORMATION: a Lysine at amino acid 54.
US-09-882-434A-21

```

Query Match 100.0%; Score 427; DB 9; Length 76;
Best Local Similarity 100.0%; Pred. No. 2.7e-42;
Matches 76; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

[illegible]

```

RESUlT 2
US-09-882-434A-19
; Sequence 19, Application US/09882434A
; Patent No. US20020108144A1
; GENERAL INFORMATION:
; APPLICANT: Manners, John M.
; APPLICANT: Marcus, John Paul
; APPLICANT: Goulter, Kenneth C.
; APPLICANT: Green, Jodie Lyn
; TITLE OF INVENTION: ANTI-MICROBIAL PROTEIN
; FILE REFERENCE: CULLEN18.1CPlC1
; CURRENT APPLICATION NUMBER: US/09/882.434A
; CURRENT FILING DATE: 2001-06-15
; PRIOR APPLICATION NUMBER: 09/364395
; PRIOR FILING DATE: 1999-07-30
; PRIOR APPLICATION NUMBER: 09/117615
; PRIOR FILING DATE: 1998-11-09
; PRIOR APPLICATION NUMBER: PCT/AU97/00052
; PRIOR FILING DATE: 1997-01-31
; PRIOR APPLICATION NUMBER: AU PN 7802
; PRIOR FILING DATE: 1996-01-31
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 19
; LENGTH: 76
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Mi54K variant. Variant MiAMP1 protein Mi54K
; OTHER INFORMATION: containing a Lysine at amino acid 54 (used primer
; OTHER INFORMATION: from SEQ ID NO:12 to produce).
US-09-882-434A-19

```

	Query Match	99.1%	Score 423;	DB 9;	Length 76;
	Best Local Similarity	99.7%	Pred. No. 7.8e-42;		
	Matches 75;	Conservative 1;	Mismatches 0;	Indels 0;	Gaps 0;
Qy	1	SAFTWVGPGGNRAERYSKGCGSAIHQKGGYDYSYTGQTAALYNKAGCGVAKTRGSS	60		
Db	1	SAFTWVGPGGNRAERYSKGCGSAIHQKGGYDYSYTGQTAALYNKAGCGVAKTRGSS	60		
Qy	61	ARACNPFQWKSIFIQC	76		
Db	61	ARACNPFQWKSIFIQC	76		

RESULT 3
US-09-882-434A-17
; Sequence 17, Application US/09882434A
; Patent No. US20020108144A1
; GENERAL INFORMATION:
; APPLICANT: Manners, John M.
; APPLICANT: Marcus, John Paul
; APPLICANT: Goulter, Kenneth C.
; APPLICANT: Green, Jodie Lynn
; TITLE OF INVENTION: ANTI-MICROBIAL PROTEIN
; FILE REFERENCE: CULLN18.1CP1C1
; CURRENT APPLICATION NUMBER: US/09/882,434A
; CURRENT FILING DATE: 2001-06-15
; PRIOR APPLICATION NUMBER: 09/364395
; PRIOR FILING DATE: 1999-07-30
; PRIOR APPLICATION NUMBER: 09/117615
; PRIOR FILING DATE: 1998-11-09

```

, PRIOR APPLICATION NUMBER: PCT/AU97/00052
,
, PRIOR FILING DATE: 1997-01-31
,
, PRIOR APPLICATION NUMBER: AU PN 7802
,
, PRIOR FILING DATE: 1996-01-31
,
, NUMBER OF SEQ ID NOS: 21
,
, SOFTWARE: FastSeq for Windows Version 4.0
,
, SEQ ID NO 17
,
, LENGTH: 76
,
, TYPE: PRT
,
, ORGANISM: Artificial Sequence
,
, FEATURE:
,
, OTHER INFORMATION: Variant MiAMP1 protein M146K
,
, OTHER INFORMATION: containing a lysine at amino acid 46 (used primer
,
, OTHER INFORMATION: from SEQ ID NO:10 to produce) .
,
, US-09-882-434A-17

```

	Query Match	98.5%;	Score 421;	DB 9;	Length 76;
	Best Local Similarity	96.%;			
	Matches	75;	Conservative	0;	Mismatches 1; Indels 0; Gaps 0;
Qy	1	SAFTVMSGPCNNRAEYSKCGCSAIHQKGGYDFSYTGQTAALYNKAGCGSGVAKTRGSS	60		
Db	1	SAFTVMSGPCNNRAEYSKCGCSAIHQKGGYDFSYTGQTAALYNKAGCGSGVAKTRGSS	60		
Qy	61	ARACNPFGWKSIIFQC	76		
Db	61	ARACNPFGWKSIIFQC	76		

```

RESULT 4
US-09-882-434A-20
US-Sequence 20, Application US/09882434A
Patent No. US20020108144A1
GENERAL INFORMATION:
APPLICANT: Manners, John M.
APPLICANT: Marcus, John Paul
APPLICANT: Goulter, Kenneth C.
APPLICANT: Green, Jodie Lyn
TITLE OF INVENTION: ANTI-MICROBIAL PROTEIN
FILE REFERENCE: CULN18.1CPC1
CURRENT APPLICATION NUMBER: US/09/882,434A
CURRENT FILING DATE: 2001-06-15
PRIOR APPLICATION NUMBER: 09/364395
PRIOR FILING DATE: 1999-07-30
PRIOR APPLICATION NUMBER: 09/117615
PRIOR FILING DATE: 1998-11-09
PRIOR APPLICATION NUMBER: PCT/AU97/00052
PRIOR FILING DATE: 1997-01-31
PRIOR APPLICATION NUMBER: AU PN 7802
PRIOR FILING DATE: 1996-01-31
NUMBER OF SEQ ID NOS: 21
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 20
LENGTH: 76
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: M146K/54V variant.
OTHER INFORMATION: M146K/54V containing a
OTHER INFORMATION: a Valine at amino acid
US-09-882-434A-20

```

Query Match	98.4%;	Score 420;	DB 9;	Length 76;
Best Local Similarity	98.7%;	Pred. No. 1.8e-41;		
Matches	75;	Conservative 0;	Mismatches 1;	Indels 0; Gaps 0;
QY	1	SAFTVWSGPGCNNRAERYSKGCSAIHQKGYDPSYTGQTAALYNKAGCGSAKTRFGSS	60	
Db	1	SAFTVWSGPGCNNRAERYSKGCSAIHQKGYDPSYTGQTAALYNKAGCGSAKTRFGSS	60	
QY	61	ARACNPFQWKSIPTQC	76	
Db	61	ARACNPFQWKSIPTQC	76	

```
; OTHER INFORMATION: containing a Valine at amino acid 54 (used primer
; OTHER INFORMATION: from SEQ ID NO:11 to produce).
US-09-882-434A-18

Query Match          97.4%; Score 416; DB 9; Length 76;
Best Local Similarity 97.4%; Pred. No. 5.2e-41;
Matches 74; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 SAFTVWSGPGCNNAERYSKGCSAIHQKGYDFS YTGQTAAALYNKAGCSGVAKTRFGSS 60
    |||||
Db 1 SAFTVWSGPGCNNAERYSKGCSAIHQKGYDFS YTGQTAAALYNKAGCSGVAKTRFGSS 60
    |||||
QY 61 ARACNPFGWKSIFIQ 76
    |||||
Db 61 ARACNPFGWKSIFIQ 76
    |||||

RESULT 7
US-09-882-434A-15
; Sequence 15, Application US/09882434A
; Patent No. US20020108144A1
; GENERAL INFORMATION:
; APPLICANT: Manners, John M.
; APPLICANT: Marcus, John Paul
; APPLICANT: Goulter, Kenneth C.
; APPLICANT: Green, Jodie Lyn
; TITLE OF INVENTION: ANTI-MICROBIAL PROTEIN
; FILE REFERENCE: CULLN18.1CP1C1
; CURRENT APPLICATION NUMBER: US/09/882,434A
; PRIOR FILING DATE: 2001-06-15
; PRIOR APPLICATION NUMBER: 09/364395
; PRIOR FILING DATE: 1999-07-30
; PRIOR APPLICATION NUMBER: 09/117615
; PRIOR FILING DATE: 1998-11-09
; PRIOR APPLICATION NUMBER: PCT/AU97/00052
; PRIOR FILING DATE: 1997-01-31
; PRIOR APPLICATION NUMBER: AU PN 7802
; PRIOR FILING DATE: 1996-01-31
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 15
; LENGTH: 76
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Mi28K variant. Variant MiAMPI protein Mi28K
; OTHER INFORMATION: containing a Lysine at amino acid 28 (used primer
; OTHER INFORMATION: from SEQ ID NO:8 to produce).
US-09-882-434A-15

Query Match          96.7%; Score 413; DB 9; Length 76;
Best Local Similarity 96.1%; Pred. No. 1.2e-40;
Matches 73; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 1 SAFTVWSGPGCNNAERYSKGCSAIHQKGYDFS YTGQTAAALYNKAGCSGVAKTRFGSS 60
    |||||
Db 1 SAFTVWSGPGCNNAERYSKGCSAIHQKGYDFS YTGQTAAALYNKAGCSGVAKTRFGSS 60
    |||||
QY 61 ARACNPFGWKSIFIQ 76
    |||||
Db 61 ARACNPFGWKSIFIQ 76
    |||||

RESULT 8
US-09-882-434A-16
; Sequence 16, Application US/09882434A
; Patent No. US20020108144A1
; GENERAL INFORMATION:
; APPLICANT: Manners, John M.
; APPLICANT: Marcus, John Paul
; APPLICANT: Goulter, Kenneth C.
; APPLICANT: Green, Jodie Lyn
; TITLE OF INVENTION: ANTI-MICROBIAL PROTEIN
```

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; OTHER INFORMATION: Mi54V variant. Variant MiAMPI protein Mi54V
; OTHER INFORMATION: from SEQ ID NO:11 to produce).
US-09-882-434A-18

Query Match          97.7%; Score 417; DB 9; Length 102;
Best Local Similarity 97.4%; Pred. No. 5.4e-41;
Matches 74; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 SAFTVWSGPGCNNAERYSKGCSAIHQKGYDFS YTGQTAAALYNKAGCSGVAKTRFGSS 60
    |||||
Db 27 SAFTVWSGPGCNNAERYSKGCSAIHQKGYDFS YTGQTAAALYNKAGCSGVAKTRFGSS 86
    |||||
QY 61 ARACNPFGWKSIFIQ 76
    |||||
Db 87 ARACNPFGWKSIFIQ 102
    |||||

RESULT 6
US-09-882-434A-18
; Sequence 18, Application US/09882434A
; Patent No. US20020108144A1
; GENERAL INFORMATION:
; APPLICANT: Manners, John M.
; APPLICANT: Marcus, John Paul
; APPLICANT: Goulter, Kenneth C.
; APPLICANT: Green, Jodie Lyn
; TITLE OF INVENTION: ANTI-MICROBIAL PROTEIN
; FILE REFERENCE: CULLN18.1CP1C1
; CURRENT APPLICATION NUMBER: US/09/882,434A
; PRIOR FILING DATE: 2001-06-15
; PRIOR APPLICATION NUMBER: 09/364395
; PRIOR FILING DATE: 1999-07-30
; PRIOR APPLICATION NUMBER: 09/117615
; PRIOR FILING DATE: 1998-11-09
; PRIOR APPLICATION NUMBER: PCT/AU97/00052
; PRIOR FILING DATE: 1997-01-31
; PRIOR APPLICATION NUMBER: AU PN 7802
; PRIOR FILING DATE: 1996-01-31
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 18
; LENGTH: 76
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Mi54V variant. Variant MiAMPI protein Mi54V
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; FILE REFERENCE: CULLM18.1CPIc1
; CURRENT APPLICATION NUMBER: US/09/882,434A
; CURRENT FILING DATE: 2001-06-15
; PRIOR APPLICATION NUMBER: 09/364395
; PRIOR FILING DATE: 1999-07-30
; PRIOR APPLICATION NUMBER: 09/117615
; PRIOR FILING DATE: 1998-11-09
; PRIOR APPLICATION NUMBER: PCT/AU97/00052
; PRIOR FILING DATE: 1997-01-31
; PRIOR APPLICATION NUMBER: AU PN 7802
; PRIOR FILING DATE: 1996-01-31
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 16
; LENGTH: 76
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: M139K variant. Variant MIAMPI protein M139K
; OTHER INFORMATION: containing a Lysine at amino acid 39 (used primer
; OTHER INFORMATION: from SEQ ID NO:9 to produce).
US-09-882-434A-16

Query Match          96.7%; Score 413; DB 9; Length 76;
Best Local Similarity 96.1%; Pred. No. 1.2e-40;
Matches 73; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 1 SAFTWSPGCGNNRAERYSKGCSAIHQGGYDFSYTGTAALYNKAGCSGVAKTRFGSS 60
DB 1 SAFTWSPGCGNNRAERYSKGCSAIHQGGYDFSYTGTAALYNKAGCSGVAKTRFGSS 60

QY 61 ARACNPFGWKSIPIQC 76
DB 61 ARACNPFGWKSIPIQC 76

RESULT 9
US-10-425-115-251061
; Sequence 251061, Application US/10425115
; Publication No. US20040214272A1
; GENERAL INFORMATION:
; APPLICANT: La Rosa, Thomas J.
; APPLICANT: Kovalic, David K.
; APPLICANT: Zhou, Yihua
; APPLICANT: Cao, Yongwei
; TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
; FILE REFERENCE: 38-21(53222)B
; CURRENT APPLICATION NUMBER: US/10/425,115
; CURRENT FILING DATE: 2003-04-28
; NUMBER OF SEQ ID NOS: 369326
; SEQ ID NO 251061
; LENGTH: 116
; TYPE: PRT
; ORGANISM: Zea mays
; FEATURE:
; OTHER INFORMATION: Clone ID: MRT4577_160554C.1.pep
US-10-425-115-251061

Query Match          39.5%; Score 168.5; DB 17; Length 116;
Best Local Similarity 38.8%; Pred. No. 7.9e-12;
Matches 31; Conservative 12; Mismatches 32; Indels 5; Gaps 2;

QY 1 SAFTWSPGCGNNRAERYSKGCSAIHQGGYDFSYTGTAALYNKAGCSGVAKTR 56
DB 38 SYLTSWGPCTTGTHKHSASAGCGCNHLRFHGGHEFNFRGETATLYSOPGCGVPIQV 97

QY 57 FGSSARACNPFGWKSIPIQC 76
DB 98 F-EDTQACGDFGWHSIHDC 116

RESULT 10
US-10-424-599-214772
; Sequence 214772, Application US/10424599
; Publication No. US20040031072A1
; GENERAL INFORMATION:
; APPLICANT: La Rosa, Thomas J.
; APPLICANT: Kovalic, David K.
; APPLICANT: Zhou, Yihua
; APPLICANT: Cao, Yongwei
; TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
; FILE REFERENCE: 38-21(53223)B
; CURRENT APPLICATION NUMBER: US/10/424,599
; CURRENT FILING DATE: 2003-04-28
; NUMBER OF SEQ ID NOS: 285684
; SEQ ID NO 214772
; LENGTH: 500
; TYPE: PRT
; ORGANISM: Glycine max
; FEATURE:
; NAME/KEY: unsure
; LOCATION: (1)..(500)
; OTHER INFORMATION: unsure at all Xaa locations
; FEATURE:
; OTHER INFORMATION: Clone ID: PAT_MRT3847_35966C.1.pep
US-10-424-599-214772

Query Match          19.1%; Score 81.5; DB 15; Length 500;
Best Local Similarity 28.9%; Pred. No. 0.55;
Matches 22; Conservative 6; Mismatches 29; Indels 19; Gaps 5;

QY 8 GPGCNNRAERYSKGCSAIHQGGYDFSYTGTAALYNKAGCSGVAKTRFGSSAR 62
DB 145 GSGCRG-----GCRVVHASNGVRRSAYEFGHLHSHACSCFGVXC-GIKSKRFG--K 192

QY 63 ACNPFGWK--SIFIQC 76
DB 193 ICKPLTWKHGDIPLMC 208

RESULT 11
US-10-425-115-303206
; Sequence 303206, Application US/10425115
; Publication No. US20040214272A1
; GENERAL INFORMATION:
; APPLICANT: La Rosa, Thomas J.
; APPLICANT: Kovalic, David K.
; APPLICANT: Zhou, Yihua
; APPLICANT: Cao, Yongwei
; TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
; FILE REFERENCE: 38-21(53222)B
; CURRENT APPLICATION NUMBER: US/10/425,115
; CURRENT FILING DATE: 2003-04-28
; NUMBER OF SEQ ID NOS: 369326
; SEQ ID NO 303206
; LENGTH: 68
; TYPE: PRT
; ORGANISM: Zea mays
; FEATURE:
; OTHER INFORMATION: Clone ID: MRT4577_39599C.1.pep
US-10-425-115-303206

Query Match          16.9%; Score 72; DB 17; Length 68;
Best Local Similarity 35.4%; Pred. No. 0.91;
Matches 23; Conservative 10; Mismatches 26; Indels 6; Gaps 4;

QY 11 CNNRAERYSKGCSAIHQGGYDFSYTGTAALYNKAGCSGVAKTRFGSSARACNPFGWK 70
DB 10 CSSQSRHSICKCSAC--KASLFFS-TGMVRHSMHMGCLG-GRIGDSSRSQORPEG-- 63

QY 71 SIFIQ 75
DB 64 SVFVQ 68
```

Db 391 RAARLSVCGIAAICQKRGYKGTGHTAADGVSYNRYP-----GFKEKAANALKDIYGV 441

RESULT 14

US-10-369-493-21896

; Sequence 21896, Application US/10369493

; Publication No. US20030233675A1

; GENERAL INFORMATION:

; APPLICANT: Cao, Yongwei

; APPLICANT: Hinkle, Gregory J.

; APPLICANT: Slater, Steven C.

; APPLICANT: Goldman, Barry S.

; APPLICANT: Chen, Xianfeng

; TITLE OF INVENTION: EXPRESSION OF MICROBIAL PROTEINS IN PLANTS FOR PRODUCTION OF

; TITLE OF INVENTION: PLANTS WITH IMPROVED PROPERTIES

; FILE REFERENCE: 38-10(52052)B

; CURRENT APPLICATION NUMBER: US/10/369,493

; CURRENT FILING DATE: 2003-02-28

; PRIOR APPLICATION NUMBER: US 60/360,039

; PRIOR FILING DATE: 2002-02-21

; NUMBER OF SEQ ID NOS: 47374

; SEQ ID NO 21896

; LENGTH: 486

; TYPE: PRT

; ORGANISM: Saccharomyces cerevisiae

US-10-369-493-21896

Query Match 16.7%; Score 71.5; DB 14; Length 486;

Best Local Similarity 31.7%; Pred. No. 8;

Matches 19; Conservative 7; Mismatches 21; Indels 13; Gaps 2;

QY 14 RAERYSKGCSAIIHQKGYDFSYTGQTAALYNKAGSGVAKTRFGSSARACNP-----FGW 69

Db 391 RAARLSVCGIAAICQKRGYKGTGHTAADGVSYNRYP-----GFKEKAANALKDIYGV 441

RESULT 15

US-10-091-135-83

; Sequence 83, Application US/10091135

; Publication No. US20030039660A1

; GENERAL INFORMATION:

; APPLICANT: King, Te piao

; APPLICANT: Spangfort, Michael Dho

; TITLE OF INVENTION: RECOMBINANT HYBRID ALLERGEN CONSTRUCTS WITH REDUCED

; TITLE OF INVENTION: ALLERGENICITY THAT RETAIN IMMUNOGENICITY OF THE NATURAL ALLERGEN

; FILE REFERENCE: 2313/1H587-US1

; CURRENT APPLICATION NUMBER: US/10/091,135

; CURRENT FILING DATE: 2002-03-04

; PRIOR APPLICATION NUMBER: US 60/272,818

; PRIOR FILING DATE: 2001-03-02

; NUMBER OF SEQ ID NOS: 98

; SOFTWARE: Patent in version 3.1

; SEQ ID NO 83

; LENGTH: 136

; TYPE: PRT

; ORGANISM: Lycopersicon esculentum

US-10-091-135-83

Query Match 16.6%; Score 71; DB 14; Length 136;

Best Local Similarity 32.3%; Pred. No. 2.4;

Matches 31; Conservative 5; Mismatches 24; Indels 36; Gaps 8;

QY 13 NFAERY--SKCG-CSAIIHQ-----KGYDFSYTGQTA-----LYNKA--GCSGV 52

Db 31 SRAQYANSRAGDCNLIHSGAGENLAKGGDF--TGRAAVQLWVSRPSYVATNOCVCG 88

QY 53 AK-----TFGSSARACNPFQWKSIFIQC 76

Db 89 KKRHYTVQVWRNSVRLGCGRARCNNNGW--WFISC 122

Search completed: November 10, 2004, 20:00:38

US-10-424-599-253846

; Sequence 253846, Application US/10424599

; Publication No. US20040031072A1

; GENERAL INFORMATION:

; APPLICANT: La Rosa Thomas J

; APPLICANT: Kovalic David K

; APPLICANT: Zhou Yihua

; APPLICANT: Cao Yongwei

; TITLE OF INVENTION: SOY Nucleic Acid Molecules and Other Molecules Associated With

; TITLE OF INVENTION: Plants and Uses thereof for Plant Improvement

; FILE REFERENCE: 38-21(53223)B

; CURRENT APPLICATION NUMBER: US/10/424,599

; CURRENT FILING DATE: 2003-04-28

; NUMBER OF SEQ ID NOS: 285684

; SEQ ID NO 253846

; LENGTH: 174

; TYPE: PRT

; ORGANISM: Glycine max

; FEATURE:

; OTHER INFORMATION: Clone ID: PAT_MRT3847_71246C.1.pep

US-10-424-599-253846

Query Match 16.9%; Score 72; DB 15; Length 174;

Best Local Similarity 42.4%; Pred. No. 2.4;

Matches 14; Conservative 7; Mismatches 12; Indels 0; Gaps 0;

QY 14 RAERYSKGCSAIIHQKGYDFSYTGQTAALYNK 46

Db 56 RAARLSACGVAACIKKRGYKGTGHTAADGVSFNK 88

RESULT 13

US-09-801-368-154

; Sequence 154, Application US/09801368

; Patent No. US20020128250A1

; GENERAL INFORMATION:

; APPLICANT: Busby, Robert

; APPLICANT: Cali, Brian

; APPLICANT: Hecht, Peter

; APPLICANT: Holtzman, Doug

; APPLICANT: Madden, Kevin

; APPLICANT: Maxon, Mary

; APPLICANT: Milne, Todd

; APPLICANT: No. US20020128250A1man, Thea

; APPLICANT: Rover, John

; APPLICANT: Salama, Sofie

; APPLICANT: Sherman, Amir

; APPLICANT: Silva, Jeff

; APPLICANT: Summers, Eric

; TITLE OF INVENTION: Methods for Improving Secondary Metabolite Production in Fungi

; FILE REFERENCE: 109272.147

; CURRENT APPLICATION NUMBER: US/09/801,368

; CURRENT FILING DATE: 2001-03-07

; PRIOR APPLICATION NUMBER: US 09/487,558

; PRIOR FILING DATE: 2000-01-19

; PRIOR APPLICATION NUMBER: US 60/160,587

; PRIOR FILING DATE: 1999-10-20

; NUMBER OF SEQ ID NOS: 440

; SOFTWARE: Patent in version 3.0

; SEQ ID NO 154

; LENGTH: 486

; TYPE: PRT

; ORGANISM: Saccharomyces cerevisiae

US-09-801-368-154

Query Match 16.7%; Score 71.5; DB 9; Length 486;

Best Local Similarity 31.7%; Pred. No. 8;

Matches 19; Conservative 7; Mismatches 21; Indels 13; Gaps 2;

QY 14 RAERYSKGCSAIIHQKGYDFSYTGQTAALYNKAGSGVAKTRFGSSARACNP-----FGW 69

us-09-882-434a-21.rapb

Fri Nov 12 11:02:10 2004

Job time : 94.5 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: November 10, 2004, 19:34:00 ; Search time 28 Seconds
(without alignments)
180.006 Million cell updates/sec

Title: US-09-882-434A-21

Perfect score: 427

Sequence: 1 SFTVWSGPCNNRAERYSK.....FGSSARACNPFQWKSIFIQC 76

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 478139 seqs, 66318000 residues

Total number of hits satisfying chosen parameters: 478139

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents AA:*

- 1: /cgn2_6/ptodata/1/iaa/5A COMB.pep.*
- 2: /cgn2_6/ptodata/1/iaa/5B COMB.pep.*
- 3: /cgn2_6/ptodata/1/iaa/6A COMB.pep.*
- 4: /cgn2_6/ptodata/1/iaa/6B COMB.pep.*
- 5: /cgn2_6/ptodata/1/iaa/PTUS COMB.pep.*
- 6: /cgn2_6/ptodata/1/iaa/backfiles1.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	75.5	17.7	486	1	US-07-872-678A-48
2	73	17.1	491	4	US-09-248-796A-17049
3	71.5	16.7	486	4	US-08-169-613A-2
4	71.5	16.7	486	4	US-08-622-191-8
5	68	15.9	486	4	US-08-622-191-7
6	67.5	15.8	459	4	US-09-328-352-4648
7	67.5	15.8	585	4	US-09-620-412C-337
8	67.5	15.8	585	4	US-09-598-419-337
9	67.5	15.8	1752	4	US-09-556-877-180
10	67.5	15.8	1752	4	US-09-620-412C-180
11	67.5	15.8	1752	4	US-09-598-419-180
12	66	15.5	115	4	US-09-252-991A-28403
13	66	15.5	856	4	US-09-699-266A-13
14	66	15.5	977	4	US-09-252-991A-16655
15	65.5	15.3	111	2	US-07-857-224B-105
16	65.5	15.3	135	2	US-07-857-224B-98
17	65.5	15.3	135	2	US-07-857-224B-98
18	65.5	15.3	312	4	US-09-252-991A-19374
19	65.5	15.3	908	4	US-08-714-741-44
20	65	15.2	176	4	US-09-270-767-33555
21	65	15.2	176	4	US-09-270-767-48772
22	63.5	14.9	1019	1	US-08-296-014A-4
23	63.5	14.9	1019	2	US-08-596-405-4
24	63.5	14.9	1019	2	US-08-877-620-4
25	63.5	14.9	1019	4	US-09-287-368-4
26	63.5	14.9	1019	4	US-09-626-795-4
27	63.5	14.9	1083	1	US-08-296-014A-2

28 63.5 14.9 1083 2 US-08-596-405-2 Sequence 2, Appli
29 63.5 14.9 1083 2 US-08-877-620-2 Sequence 2, Appli
30 63.5 14.9 1083 4 US-09-287-368-2 Sequence 2, Appli
31 63.5 14.9 1083 4 US-09-626-795-2 Sequence 30166, A
32 63 14.8 365 4 US-09-252-991A-30166 Sequence 19245, A
33 62.5 14.6 139 4 US-09-252-991A-19245 Sequence 2, Appli
34 62.5 14.6 902 1 US-08-701-846-2 Sequence 4, Appli
35 62 14.5 1196 1 US-08-144-121-4 Sequence 4, Appli
36 62 14.5 1196 2 US-08-735-893-4 Sequence 16, Appl
37 62 14.5 1765 4 US-09-562-702A-16 Sequence 16, Appl
38 62 14.5 1765 4 US-09-561-818A-16 Sequence 14, Appl
39 62 14.5 1786 4 US-09-562-702A-14 Sequence 14, Appl
40 62 14.5 1786 4 US-09-561-818A-14 Sequence 14, Appl
41 62 14.5 1786 4 US-09-561-709B-9 Sequence 9, Appli
42 62 14.5 1786 4 US-09-538-092-869 Sequence 869, App
43 61.5 14.4 156 4 US-09-252-991A-24413 Sequence 24413, A
44 61 14.3 173 4 US-09-252-991A-30903 Sequence 30903, A
45 61 14.3 1572 4 US-09-562-702A-32 Sequence 32, Appl

ALIGNMENTS

RESULT 1

US-07-872-678A-48
; Sequence 48, Application US/07872678A
; Patent No. 5541060
; GENERAL INFORMATION:
; APPLICANT: Bell, Graeme, et al.
; TITLE OF INVENTION: DETECTION OF EARLY-ONSET
; TITLE OF INVENTION: NON-INSULIN-DEPENDENT DIABETES MELLITUS
; NUMBER OF SEQUENCES: 48
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Arnold, White & Durkee
; STREET: Post Office Box 4433
; CITY: Houston
; STATE: Texas
; COUNTRY: USA
; ZIP: 77210
; COMPUTER READABLE FORM: disk
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/872,678A
; FILING DATE: 22-APRIL-1992
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Coughlin, Daniel F.
; REGISTRATION NUMBER: 36,111
; REFERENCE/DOCKET NUMBER: ARCD016
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 713-787-1400
; TELEFAX: 713-789-2679
; TELEX: 79-0924
; INFORMATION FOR SEQ ID NO: 48:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 486 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-07-872-678A-48

Query Match 17.7%; Score 75.5; DB 1; Length 486;
Best Local Similarity 39.3%; Pred. No. 0.79; Mismatches 4; Indels 15; Gaps 4;

Matches 24; Conservative 4; Mismatches 18; Indels 15; Gaps 4;

QY 14 RAERYSKGCSAIHQGGYDFSYTGTAAIYNKAGCSGVAKTRF-GSSARACNP---PG 68

DB 391 RAARLSVCGIAACQKRGV---TGHIAA-----DGSVSTRYGFKEKANALKDIYG 440

```
QY      69 W 69  
       |  
Db     441 W 441
```

RESULT 2

US-09-248-796A-17049 ; Sequence 17049, Application US/09248796A
; Patent No. 6747137
; GENERAL INFORMATION:
; APPLICANT: Keith Weinstock et al
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO CANDIDA ALBICAN
; FILE REFERENCE: 107196.132
; CURRENT APPLICATION NUMBER: US/09/248,796A
; PRIORITY FILING DATE: 1999-02-12
; PRIOR APPLICATION NUMBER: US 60/074,725
; PRIORITY FILING DATE: 1998-02-13
; PRIOR APPLICATION NUMBER: US 60/096,409
; PRIORITY FILING DATE: 1998-08-13
; NUMBER OF SEQ ID NOS: 28208
; SEQ ID NO 17049
; LENGTH: 491
; TYPE: PRN
; ORGANISM: Candida albicans
US-09-248-796A-17049

Query Match 17.1%; Score 73; DB 4; Length 491;
Best Local Similarity 42.4%; Pred. No. 1.6;
Matches 14; Conservative 7; Mismatches 12; Indels 0; Gaps 0;

QY 14 RAERYSKGCGSAIHOKGGYDFSYTGOTAAALYNK 46
 |:|:||||:||||::|:
Db 398 RSARFSVCGIAAIQCRRGYKTACADGSVNK 430

RESULT 3

US-08-169-613A-2
; Sequence 2, Application US/08169613A
; Patent No. 6486380
; GENERAL INFORMATION:
; APPLICANT: Epstein, Paul
; TITLE OF INVENTION: Pancreatic B Cell Hexokinase Transgene
; FILE REFERENCE: P0044UO
; CURRENT APPLICATION NUMBER: US/08/169,613A
; PRIORITY FILING DATE: 1993-12-17
; NUMBER OF SEQ ID NOS: 4
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 2
; LENGTH: 486
; TYPE: PRN
; ORGANISM: Yeast
US-08-169-613A-2

Query Match 16.7%; Score 71.5; DB 4; Length 486;
Best Local Similarity 31.7%; Pred. No. 2.4;
Matches 19; Conservative 7; Mismatches 21; Indels 13; Gaps 2;

QY 14 RAERYSKGCGSAIHOKGGYDFSYTGOTAAALYNKAGCSGVAKTRFGSSRACNP----PGW 69
 |||||::|:||||::|:
Db 391 RAARLSVCGLAACQRKGTYKHGAADSGVINRYP-----GFKEKAANKLDIYGW 441

RESULT 4

US-08-622-191-8
; Sequence 8, Application US/08622191A
; Patent No. 6632602
; GENERAL INFORMATION:
; APPLICANT: Sheen, Jen
; APPLICANT: Jang, Jyan-Chyun
; TITLE OF INVENTION: PLANT SUGAR SENSORS AND USES THEREOF
; FILE REFERENCE: 007867/307001
; CURRENT APPLICATION NUMBER: US/08/622,191A


```
RESULT 7
US-09-620-412C-337
; Sequence 337, Application US/09620412C
; Patent No. 6448234
; GENERAL INFORMATION:
; APPLICANT: Steven P. Fling
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR TREATMENT AND
; FILE REFERENCE: 210121.469C7
; CURRENT APPLICATION NUMBER: US/09/620,412C
; CURRENT FILING DATE: 2000-07-20
; NUMBER OF SEQ ID NOS: 363
; SOFTWARE: FastSEQ for Windows Version 3.0/4.0
; SEQ ID NO 337
; LENGTH: 585
; TYPE: PRT
; ORGANISM: Chlamydia trachomatis
US-09-620-412C-337

Query Match      15.8%; Score 67.5; DB 4; Length 585;
Best Local Similarity 35.1%; Pred. No. 8.8;
Matches 20; Conservative 5; Mismatches 29; Indels 3; Gaps 1;

QY 18 YSKGCSAIHQGGYDFSYTGTAALYNKAGCSGVAKTRFGS---SARACNPGWKS 71
Db 164 YSKQGGGALYVEGGINFQDLEIRIKYNKAGTFTTKITLPSLKAQASAGNADAWAS 220

RESULT 8
US-09-598-419-337
; Sequence 337, Application US/09598419
; Patent No. 6565856
; GENERAL INFORMATION:
; APPLICANT: Skeiky, Yasir A.W.
; APPLICANT: Scholler, John
; TITLE OF INVENTION: COMPOUNDS AND METHODS FOR TREATMENT AND
; FILE REFERENCE: 210121.469C6
; CURRENT APPLICATION NUMBER: US/09/598,419
; CURRENT FILING DATE: 2000-06-20
; NUMBER OF SEQ ID NOS: 357
; SOFTWARE: FastSEQ for Windows Version 3.0/4.0
; SEQ ID NO 337
; LENGTH: 585
; TYPE: PRT
; ORGANISM: Chlamydia trachomatis
US-09-598-419-337

Query Match      15.8%; Score 67.5; DB 4; Length 585;
Best Local Similarity 35.1%; Pred. No. 8.8;
Matches 20; Conservative 5; Mismatches 29; Indels 3; Gaps 1;

QY 18 YSKGCSAIHQGGYDFSYTGTAALYNKAGCSGVAKTRFGS---SARACNPGWKS 71
Db 164 YSKQGGGALYVEGGINFQDLEIRIKYNKAGTFTTKITLPSLKAQASAGNADAWAS 220

RESULT 9
US-09-556-877-180
; Sequence 180, Application US/09556877
; Patent No. 6432916
; GENERAL INFORMATION:
; APPLICANT: Probst, Peter
; APPLICANT: Bhatia, Ajay
; APPLICANT: Skeiky, Yasir
; APPLICANT: Fling, Steve
; APPLICANT: Maisonneuve, Jeff
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR TREATMENT AND
; FILE REFERENCE: 210121.469C5
; CURRENT APPLICATION NUMBER: US/09/556,877
; CURRENT FILING DATE: 2000-04-19
; NUMBER OF SEQ ID NOS: 305
; SOFTWARE: FastSEQ for Windows Version 3.0/4.0
; SEQ ID NO 180
; LENGTH: 1752
; TYPE: PRT
; ORGANISM: Chlamydia
US-09-556-877-180

Query Match      15.8%; Score 67.5; DB 4; Length 1752;
Best Local Similarity 35.1%; Pred. No. 31;
Matches 20; Conservative 5; Mismatches 29; Indels 3; Gaps 1;

QY 18 YSKGCSAIHQGGYDFSYTGTAALYNKAGCSGVAKTRFGS---SARACNPGWKS 71
Db 346 YSKQGGGALYVEGGINFQDLEIRIKYNKAGTFTTKITLPSLKAQASAGNADAWAS 402

RESULT 10
US-09-620-412C-180
; Sequence 180, Application US/09620412C
; Patent No. 6448234
; GENERAL INFORMATION:
; APPLICANT: Steven P. Fling
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR TREATMENT AND
; FILE REFERENCE: 210121.469C7
; CURRENT APPLICATION NUMBER: US/09/620,412C
; CURRENT FILING DATE: 2000-07-20
; NUMBER OF SEQ ID NOS: 363
; SOFTWARE: FastSEQ for Windows Version 3.0/4.0
; SEQ ID NO 180
; LENGTH: 1752
; TYPE: PRT
; ORGANISM: Chlamydia
US-09-620-412C-180

Query Match      15.8%; Score 67.5; DB 4; Length 1752;
Best Local Similarity 35.1%; Pred. No. 31;
Matches 20; Conservative 5; Mismatches 29; Indels 3; Gaps 1;

QY 18 YSKGCSAIHQGGYDFSYTGTAALYNKAGCSGVAKTRFGS---SARACNPGWKS 71
Db 346 YSKQGGGALYVEGGINFQDLEIRIKYNKAGTFTTKITLPSLKAQASAGNADAWAS 402

RESULT 11
US-09-598-419-180
; Sequence 180, Application US/09598419
; Patent No. 6565856
; GENERAL INFORMATION:
; APPLICANT: Skeiky, Yasir A.W.
; APPLICANT: Scholler, John
; TITLE OF INVENTION: COMPOUNDS AND METHODS FOR TREATMENT AND
; FILE REFERENCE: 210121.469C6
; CURRENT APPLICATION NUMBER: US/09/598,419
; CURRENT FILING DATE: 2000-06-20
; NUMBER OF SEQ ID NOS: 357
; SOFTWARE: FastSEQ for Windows Version 3.0/4.0
; SEQ ID NO 180
; LENGTH: 1752
; TYPE: PRT
; ORGANISM: Chlamydia
US-09-598-419-180

Query Match      15.8%; Score 67.5; DB 4; Length 1752;
Best Local Similarity 35.1%; Pred. No. 31;
Matches 20; Conservative 5; Mismatches 29; Indels 3; Gaps 1;

QY 18 YSKGCSAIHQGGYDFSYTGTAALYNKAGCSGVAKTRFGS---SARACNPGWKS 71
Db 346 YSKQGGGALYVEGGINFQDLEIRIKYNKAGTFTTKITLPSLKAQASAGNADAWAS 402
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RESULT 12

US-09-252-991A-28403
 ; Sequence 28403, Application US/09252991A
 ; Patent No. 6551795
 ; GENERAL INFORMATION:
 ; APPLICANT: Marc J. Rubenfield et al.
 ; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
 ; TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
 ; FILE REFERENCE: 107196.136
 ; CURRENT APPLICATION NUMBER: US/09/252,991A
 ; CURRENT FILING DATE: 1999-02-18
 ; PRIOR APPLICATION NUMBER: US 60/074,788
 ; PRIOR FILING DATE: 1998-02-18
 ; PRIOR APPLICATION NUMBER: US 60/094,190
 ; PRIOR FILING DATE: 1998-07-27
 ; NUMBER OF SEQ ID NOS: 33142
 ; SEQ ID NO 28403
 ; LENGTH: 115
 ; TYPE: PRT
 ; ORGANISM: Pseudomonas aeruginosa
 US-09-252-991A-28403

Query Match 15.5%; Score 66; DB 4; Length 115;
 Best Local Similarity 30.0%; Pred. No. 2;
 Matches 24; Conservative 3; Mismatches 29; Indels 24; Gaps 4;
 QY 2 AFTWSGPCNNRA-----ERYSKC-----GCSAIHQGGYDFSYTGQTALY 44
 DB 42 ATACWSRPTCNRRCSAWESTRCTWCFTTTATASPRNCSPAITKAG-----CGSPAPCS 96
 QY 45 NKAGCGVAKTRFGSSARAC 64
 DB 97 SNVCGSRKRTAR--CSARSC 114

RESULT 13

US-09-699-266A-13
 ; Sequence 13, Application US/09699266A
 ; Patent No. 6559354
 ; GENERAL INFORMATION:
 ; APPLICANT: Ma, Hongchang
 ; APPLICANT: Morakinyo, Layo O.
 ; APPLICANT: Odell, Joan T.
 ; APPLICANT: Grozsko Jr., Emil M.
 ; APPLICANT: Rafalski, J. Antoni
 ; TITLE OF INVENTION: TRANSCRIPTION AND GENE EXPRESSION REGULATORS
 ; FILE REFERENCE: BB1164 US NA
 ; CURRENT APPLICATION NUMBER: US/09/699,266A
 ; CURRENT FILING DATE: 2000-10-27
 ; PRIOR APPLICATION NUMBER: PCT/US99/08385
 ; PRIOR FILING DATE: 1999-04-15
 ; PRIOR APPLICATION NUMBER: 60/083,212
 ; PRIOR FILING DATE: 1998-04-27
 ; NUMBER OF SEQ ID NOS: 13
 ; SOFTWARE: Microsoft Office 97
 ; SEQ ID NO 13
 ; LENGTH: 856
 ; TYPE: PRT
 ; ORGANISM: Arabidopsis thaliana
 US-09-699-266A-13

Query Match 15.5%; Score 66; DB 4; Length 856;
 Best Local Similarity 21.7%; Pred. No. 21;
 Matches 20; Conservative 13; Mismatches 37; Indels 22; Gaps 3;
 QY 4 TWWS--GFCNNRERYKQCSAIHQGGYDFSYTGQTALYNAKCGSGVAKTRFG--- 58
 DB 592 SVWKRIAGGNQSCQYTPCGCLSM---CGKDCPLTNETCEKYCGCKSKCNFRGCH 648
 QY 59 -----SSARACPFPGWKSIFQC 76
 DB 649 CAKSQCRSRQPCFAAGRECDPDVCRNCWVSC 680

RESULT 14

US-09-252-991A-16655
 ; Sequence 16655, Application US/09252991A
 ; Patent No. 6551795
 ; GENERAL INFORMATION:
 ; APPLICANT: Marc J. Rubenfield et al.
 ; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
 ; TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
 ; FILE REFERENCE: 107196.136
 ; CURRENT APPLICATION NUMBER: US/09/252,991A
 ; CURRENT FILING DATE: 1999-02-18
 ; PRIOR APPLICATION NUMBER: US 60/074,788
 ; PRIOR FILING DATE: 1998-02-18
 ; PRIOR APPLICATION NUMBER: US 60/094,190
 ; PRIOR FILING DATE: 1998-07-27
 ; NUMBER OF SEQ ID NOS: 33142
 ; SEQ ID NO 16655
 ; LENGTH: 977
 ; TYPE: PRT
 ; ORGANISM: Pseudomonas aeruginosa
 US-09-252-991A-16655

Query Match 15.5%; Score 66; DB 4; Length 977;
 Best Local Similarity 31.6%; Pred. No. 24;
 Matches 24; Conservative 6; Mismatches 26; Indels 20; Gaps 5;
 QY 9 PCNNRERYSKCG-CSAIHQGGYDFSYTGQTALYNNK---AG-----CSGVAK 54
 DB 179 FGWRRRAQRRAQVGRVCRATRTGG-----AGDRPASQDRPEDAGRQATHPAFLCRGNRR 233
 QY 55 TRFGSSARACNP-FGW 69
 DB 234 HRSGSPARPSQPENGM 249

RESULT 15

US-07-857-224B-105
 ; Sequence 105, Application US/07857224B
 ; Patent No. 5958784
 ; GENERAL INFORMATION:
 ; APPLICANT: Benner, Steven A.
 ; TITLE OF INVENTION: Predicting Folded Structures of Proteins
 ; NUMBER OF SEQUENCES: 114
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Steven A. Benner
 ; STREET: Hadlaubstrasse 151
 ; CITY: Zurich
 ; STATE: none
 ; COUNTRY: Switzerland
 ; ZIP: (note: this is an international post code) CH-8092
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: 3.5 inch diskette, 1.4 Mb storage
 ; COMPUTER: Apple Macintosh
 ; OPERATING SYSTEM: Macintosh 7.0
 ; SOFTWARE: Microsoft Word
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/07/857,224B
 ; FILING DATE: 03/25/92
 ; CLASSIFICATION: 436
 ; PRIOR APPLICATION DATA: none
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: (International) 41 1 632 2830
 ; TELEFAX: (International) 41 1 262 2437
 ; TELEX: none
 ; INFORMATION FOR SEQ ID NO: 105:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 111
 ; TYPE: amino acid
 ; TOPOLOGY: linear
 ; MOLECULE TYPE: protein
 ; DESCRIPTION: protein
 ; ORIGINAL SOURCE:

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: November 10, 2004, 19:42:13 ; Search time 94.5 Seconds
(without alignments)
284.076 Million cell updates/sec

Title: US-09-882-434A-20
Perfect score: 426
Sequence: 1 SAFTVMSGPCNNRAERYSK.....FGSSARACNPFQWKSIFIQC 76

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1566620 segs, 353225886 residues

Total number of hits satisfying chosen parameters: 1566620

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published Applications AA:
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2: /cgn2_6/ptodata/1/pubpaa/PCT_NEW_PUB.pep.*
3: /cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep.*
4: /cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB.pep.*
5: /cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep.*
6: /cgn2_6/ptodata/1/pubpaa/PCTUS_PUBCOMB.pep.*
7: /cgn2_6/ptodata/1/pubpaa/US08_NEW_PUB.pep.*
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12: /cgn2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pep.*
13: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep.*
14: /cgn2_6/ptodata/1/pubpaa/US10C_PUBCOMB.pep.*
15: /cgn2_6/ptodata/1/pubpaa/US10D_PUBCOMB.pep.*
16: /cgn2_6/ptodata/1/pubpaa/US10E_PUBCOMB.pep.*
17: /cgn2_6/ptodata/1/pubpaa/US10F_PUBCOMB.pep.*
18: /cgn2_6/ptodata/1/pubpaa/US10G_PUBCOMB.pep.*
19: /cgn2_6/ptodata/1/pubpaa/US10H_PUBCOMB.pep.*
20: /cgn2_6/ptodata/1/pubpaa/US60_NEW_PUB.pep.*
21: /cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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1	426	100.0	76	9 US-09-882-434A-20	Sequence 20, Appl
2	422	99.1	76	9 US-09-882-434A-18	Sequence 18, Appl
3	420	98.6	76	9 US-09-882-434A-21	Sequence 21, Appl
4	419	98.4	76	9 US-09-882-434A-17	Sequence 17, Appl
5	416	97.7	76	9 US-09-882-434A-19	Sequence 19, Appl
6	415	97.4	102	9 US-09-882-434A-1	Sequence 1, Appl
7	411	96.5	76	9 US-09-882-434A-16	Sequence 16, Appl
8	411	96.5	76	9 US-09-882-434A-15	Sequence 15, Appl
9	169.5	39.8	116	17 US-10-425-115-251061	Sequence 251061,
10	79.5	18.7	500	15 US-10-424-599-214772	Sequence 214772,
11	72	16.9	92	16 US-10-437-963-184834	Sequence 184834,
12	72	16.9	174	15 US-10-424-599-253846	Sequence 253846,
13	71.5	16.8	486	9 US-09-801-368-154	Sequence 154, App

14	71.5	16.8	486	14	US-10-369-493-21896	Sequence 21896, A
15	71	16.7	557	14	US-10-369-493-3800	Sequence 3800, Ap
16	69.5	16.3	1690	14	US-10-184-644-449	Sequence 449, App
17	69.5	16.3	1690	14	US-10-184-634-449	Sequence 449, App
18	69	16.2	68	17	US-10-425-115-303206	Sequence 303206,
19	68.5	16.1	1174	14	US-10-123-155-271	Sequence 271, App
20	68.5	16.1	1174	14	US-10-146-731-271	Sequence 271, App
21	68.5	16.1	1174	14	US-10-140-472-271	Sequence 271, App
22	68.5	16.1	1174	14	US-10-141-761-271	Sequence 271, App
23	68.5	16.1	1174	14	US-10-142-885-271	Sequence 271, App
24	68.5	16.1	1174	14	US-10-158-790-271	Sequence 271, App
25	68.5	16.1	1174	14	US-10-137-871-271	Sequence 271, App
26	68.5	16.1	1174	14	US-10-140-923-271	Sequence 271, App
27	68.5	16.1	1174	14	US-10-141-756-271	Sequence 271, App
28	68.5	16.1	1174	14	US-10-141-759-271	Sequence 271, App
29	68.5	16.1	1174	14	US-10-140-805-271	Sequence 271, App
30	68.5	16.1	1174	14	US-10-140-864-271	Sequence 271, App
31	68.5	16.1	1174	15	US-10-142-426-271	Sequence 271, App
32	68	16.0	485	14	US-10-369-493-21893	Sequence 21893, A
33	67.5	15.8	7285	14	US-10-145-206-28	Sequence 28, Appl
34	67	15.7	2628	15	US-10-038-854-40	Sequence 40, Appl
35	67	15.7	2715	15	US-10-042-865-52	Sequence 52, Appl
36	67	15.7	2715	15	US-10-029-020-51	Sequence 51, Appl
37	67	15.7	2721	15	US-10-038-854-38	Sequence 38, Appl
38	67	15.7	2725	15	US-10-038-854-36	Sequence 36, Appl
39	66.5	15.6	147	13	US-10-016-634A-115	Sequence 115, App
40	66.5	15.6	147	16	US-10-408-765A-1526	Sequence 1526, Ap
41	66.5	15.6	147	9	US-09-841-132-337	Sequence 337, App
42	66.5	15.6	1557	14	US-10-369-493-6816	Sequence 6816, Ap
43	66.5	15.6	1752	9	US-09-841-132-180	Sequence 180, App
44	66	15.5	146	16	US-10-767-701-60832	Sequence 60832, A
45	66	15.5	1576	14	US-10-037-182-16	Sequence 16, Appl

ALIGNMENTS

RESULT 1
US-09-882-434A-20
; Sequence 20, Application US/09882434A
; Patent No. US20020108144A1
; GENERAL INFORMATION:
; APPLICANT: Manners, John M.
; APPLICANT: Marcus, John Paul
; APPLICANT: Goulter, Kenneth C.
; APPLICANT: Green, Jodie Lyn
; TITLE OF INVENTION: ANTI-MICROBIAL PROTEIN
; FILE REFERENCE: CULIN18.1CPI1
; CURRENT APPLICATION NUMBER: US/09/882,434A
; CURRENT FILING DATE: 2001-06-15
; PRIOR APPLICATION NUMBER: 09/364395
; PRIOR FILING DATE: 1999-07-30
; PRIOR APPLICATION NUMBER: 09/117615
; PRIOR FILING DATE: 1998-11-09
; PRIOR APPLICATION NUMBER: PCT/AU97/00052
; PRIOR FILING DATE: 1997-01-31
; PRIOR APPLICATION NUMBER: AU PN 7802
; PRIOR FILING DATE: 1996-01-31
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FASTSEQ for Windows Version 4.0
; SEQ ID NO 20
; LENGTH: 76
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: M146K/54V variant. Variant M146K/54V protein
; OTHER INFORMATION: M146K/54V containing a Lysine at amino acid 46 and
; OTHER INFORMATION: a Valine at amino acid 54.
US-09-882-434A-20

Query Match 100.0%; Score 426; DB 9; Length 76;
Best Local Similarity 100.0%; Pred. No. 1.3e-42;
Matches 76; Conservative 0; Mismatches 0; Indels 0; Gaps 0;


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; TYPE: PRT
; ORGANISM: Macadamia integrifolia
US-09-882-434A-1

Query Match
Best Local Similarity 97.4%; Score 415; DB 9; Length 102;
Matches 74; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 SAFTVWSGPGCNNRAERYSKGCSAHHQKGGYDFSYTGQTAAALYNKAGCSGVAVTRFGSS 60
Db 27 SAFTVWSGPGCNNRAERYSKGCSAHHQKGGYDFSYTGQTAAALYNKAGCSGVAVTRFGSS 86
QY 61 ARACNPFGWKSIPIQC 76
Db 87 ARACNPFGWKSIPIQC 102

RESULT 7
US-09-882-434A-15
; Sequence 15, Application US/09882434A
; Patent No. US20020108144A1
; GENERAL INFORMATION:
; APPLICANT: Manners, John M.
; APPLICANT: Marcus, John Paul
; APPLICANT: Goulter, Kenneth C.
; APPLICANT: Green, Jodie Lyn
; TITLE OF INVENTION: ANTI-MICROBIAL PROTEIN
; FILE REFERENCE: CULN18.1CPI1
; CURRENT APPLICATION NUMBER: US/09/882,434A
; PRIOR FILING DATE: 2001-06-15
; PRIOR APPLICATION NUMBER: 09/364395
; PRIOR FILING DATE: 1999-07-30
; PRIOR APPLICATION NUMBER: 09/117615
; PRIOR FILING DATE: 1998-11-09
; PRIOR APPLICATION NUMBER: PCT/AU97/00052
; PRIOR FILING DATE: 1997-01-31
; PRIOR APPLICATION NUMBER: AU PN 7802
; PRIOR FILING DATE: 1996-01-31
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 15
; LENGTH: 76
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: M128K variant. Variant M1A1P1 protein M128K
; OTHER INFORMATION: containing a Lysine at amino acid 28 (used primer
; OTHER INFORMATION: from SEQ ID NO:8 to produce).
US-09-882-434A-15

Query Match
Best Local Similarity 96.5%; Score 411; DB 9; Length 76;
Matches 73; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 1 SAFTVWSGPGCNNRAERYSKGCSAHHQKGGYDFSYTGQTAAALYNKAGCSGVAVTRFGSS 60
Db 1 SAFTVWSGPGCNNRAERYSKGCSAHHQKGGYDFSYTGQTAAALYNKAGCSGVAVTRFGSS 60
QY 61 ARACNPFGWKSIPIQC 76
Db 61 ARACNPFGWKSIPIQC 76

RESULT 8
US-09-882-434A-16
; Sequence 16, Application US/09882434A
; Patent No. US20020108144A1
; GENERAL INFORMATION:
; APPLICANT: Manners, John M.
; APPLICANT: Marcus, John Paul
; APPLICANT: Goulter, Kenneth C.
; APPLICANT: Green, Jodie Lyn
; TITLE OF INVENTION: ANTI-MICROBIAL PROTEIN

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; FILE REFERENCE: CULLIN18.1CPL1C1
; CURRENT APPLICATION NUMBER: US/09/882,434A
; CURRENT FILING DATE: 2001-06-15
; PRIOR APPLICATION NUMBER: 09/364395
; PRIOR FILING DATE: 1999-07-30
; PRIOR APPLICATION NUMBER: 09/117615
; PRIOR FILING DATE: 1998-11-09
; PRIOR APPLICATION NUMBER: PCT/AU97/00052
; PRIOR FILING DATE: 1997-01-31
; PRIOR APPLICATION NUMBER: AU PN 7802
; PRIOR FILING DATE: 1996-01-31
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: Fast-Seq for Windows Version 4.0
; SEQ ID NO 16
; LENGTH: 76
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Mi39K variant. Variant MiAMP1 protein Mi39K
; OTHER INFORMATION: containing a Lysine at amino acid 39 (used primer
; OTHER INFORMATION: from SEQ ID NO:9 to produce).
;
US-09-882-434A-16

Query Match          96.5%; Score 411; DB 9; Length 76;
Best Local Similarity 96.1%; Pred. No. 7.7e-41;
Matches 73; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 1 SAFTVSGPGCNNAERYSKGCSAIHQKGYDFSITGOTAAALYNKAGCSGVAVTRFGSS 60
Db 1 SAFTVSGPGCNNAERYSKGCSAIHQKGYDFSITGOTAAALYNKAGCSGVAVTRFGSS 60

Qy 61 ARACNPFQWKSIIFIQC 76
Db 61 ARACNPFQWKSIIFIQC 76

RESULT 9
US-10-425-115-251061
; Sequence 251061, Application US/10425115
; Publication No. US20040214272A1
; GENERAL INFORMATION:
; APPLICANT: La Rosa, Thomas J.
; APPLICANT: Kovalic, David K.
; APPLICANT: Zhou, Yihua
; APPLICANT: Cao, Yongwei
; TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
; TITLE OF INVENTION: Plants
; FILE REFERENCE: 38-21(53222)B
; CURRENT APPLICATION NUMBER: US/10/425,115
; CURRENT FILING DATE: 2003-04-28
; NUMBER OF SEQ ID NOS: 369326
; SEQ ID NO 251061
; LENGTH: 116
; TYPE: PRT
; ORGANISM: Zea mays
; FEATURE:
; OTHER INFORMATION: Clone ID: MPT4577_160554C.1.pep
US-10-425-115-251061

Query Match          39.8%; Score 169.5; DB 17; Length 116;
Best Local Similarity 38.8%; Pred. No. 4.2e-12;
Matches 31; Conservative 12; Mismatches 32; Indels 5; Gaps 2;

Qy 1 SAFTVSGPGCNNAERY----SKGCSAIHQKGYDFSITGOTAAALYNKAGCSGVAVTR 56
Db 38 SVLTWSGGPGCTTGTGHTIASGCCCNHLRFHGHEFNFRGTATLISQPCVGTPIQV 97

Qy 57 FGSSARACNPFQWKSIIFIQC 76
Db 98 F-EDTQACGDFGWHSHIDC 116

RESULT 10
US-10-424-599-214772
; Sequence 214772, Application US/10424599
; Publication No. US20040031072A1
; GENERAL INFORMATION:
; APPLICANT: La Rosa, Thomas J.
; APPLICANT: Kovalic, David K.
; APPLICANT: Zhou, Yihua
; APPLICANT: Cao, Yongwei
; TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
; TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
; FILE REFERENCE: 38-21(53223)B
; CURRENT APPLICATION NUMBER: US/10/424,599
; CURRENT FILING DATE: 2003-04-28
; NUMBER OF SEQ ID NOS: 285684
; SEQ ID NO 214772
; LENGTH: 500
; TYPE: PRT
; ORGANISM: Glycine max
; FEATURE:
; NAME/KEY: unsure
; LOCATION: (1)..(500)
; OTHER INFORMATION: unsure at all Xaa locations
; FEATURE:
; OTHER INFORMATION: Clone ID: PAT_MRT3847_35966C.1.pep
US-10-424-599-214772

Query Match          18.7%; Score 79.5; DB 15; Length 500;
Best Local Similarity 28.9%; Pred. No. 0.83;
Matches 22; Conservative 6; Mismatches 29; Indels 19; Gaps 5;

Qy 8 GPGCNNAERYSKGCSAIHQKGY----YDFSITGOTAAALYNKAGCSGVAVTRFGSSAR 62
Db 145 GSGCRG-----GCRVHASNGVRRSAYEFHGHSHACSCFGVKC-GIKSKRFG---K 192

Qy 63 ACNPFQWK--SIFIQC 76
Db 193 ICKPLTWKHGDFLMC 208

RESULT 11
US-10-437-963-184834
; Sequence 184834, Application US/10437963
; Publication No. US20040123343A1
; GENERAL INFORMATION:
; APPLICANT: La Rosa, Thomas J.
; APPLICANT: Kovalic, David K.
; APPLICANT: Zhou, Yihua
; APPLICANT: Cao, Yongwei
; APPLICANT: Wu, Wei
; APPLICANT: Boukharov, Andrey A.
; APPLICANT: Barbazuk, Brad
; APPLICANT: Li, Ping
; TITLE OF INVENTION: Rice Nucleic Acid Molecules and Other Molecules Associated With
; TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
; FILE REFERENCE: 38-21(53221)B
; CURRENT APPLICATION NUMBER: US/10/437,963
; CURRENT FILING DATE: 2003-05-14
; NUMBER OF SEQ ID NOS: 204966
; SEQ ID NO 184834
; LENGTH: 92
; TYPE: PRT
; ORGANISM: Oryza sativa
; FEATURE:
; OTHER INFORMATION: Clone ID: PAT_MRT4530_8178C.1.pep
US-10-437-963-184834

Query Match          16.9%; Score 72; DB 16; Length 92;
Best Local Similarity 33.8%; Pred. No. 1.1;
Matches 22; Conservative 8; Mismatches 21; Indels 14; Gaps 4;

Qy 5 VMSG---FGCNR---AERYSKGCSAIHQKGYD-----FSYTGOTAAALYNKAGCSG 51
Db 19 VMSGRTFVCSNSVHVVEDAAACGHAIRHFRFRDAGTTHRGFGHDARCGG-YRQSGDDG 77
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QY 52 VAVTR 56
Db 78 VVHR 82

BEST LOCAL SIMILARITY 31.7%; Pred. No. 7.1;
Matches 19; Conservative 7; Mismatches 21; Indels 13; Gaps 2;

QY 14 RAERYSKGCSAIHOKGYDFSYTGQTAALYNKAGSGVAVTRFGSSARACNP-----FGW 69
Db 391 RAARLSVCGIAAICQKRGYKTHAAGDSVYNRP-----GFKEAANALKDIYGW 441

RESULT 12
US-10-424-599-253846
; Sequence 253846, Application US/10424599
; Publication No. US20040031072A1
; GENERAL INFORMATION:
; APPLICANT: La Rosa Thomas J
; APPLICANT: Kovalic David K
; APPLICANT: Zhou Yihua
; APPLICANT: Cao Yongwei
; TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
; TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
; FILE REFERENCE: 38-21(53223)B
; CURRENT APPLICATION NUMBER: US/10/424,599
; CURRENT FILING DATE: 2003-04-28
; NUMBER OF SEQ ID NOS: 285684
; SEQ ID NO 253846
; LENGTH: 174
; TYPE: PRT
; ORGANISM: Glycine max
; FEATURE:
; OTHER INFORMATION: Clone ID: PAT_MRT3847_71246C.1.pep
US-10-424-599-253846

Query Match 16.9%; Score 72; DB 15; Length 174;
Best Local Similarity 42.4%; Pred. No. 2.1;
Matches 14; Conservative 7; Mismatches 12; Indels 0; Gaps 0;

QY 14 RAERYSKGCSAIHOKGYDFSYTGQTAALYNK 46
Db 56 RAARLSACGVAALCKKKGYKTHAIVGDSGVFNK 88

RESULT 13
US-09-801-368-154
; Sequence 154, Application US/09801368
; Patent No. US20020128250A1
; GENERAL INFORMATION:
; APPLICANT: Busby, Robert
; APPLICANT: Cali, Brian
; APPLICANT: Hecht, Peter
; APPLICANT: Holtzman, Doug
; APPLICANT: Madden, Kevin
; APPLICANT: Maxon, Mary
; APPLICANT: Milne, Todd
; APPLICANT: No. US20020128250Alman, Thea
; APPLICANT: Royer, John
; APPLICANT: Salama, Sofie
; APPLICANT: Sherman, Amir
; APPLICANT: Silva, Jeff
; APPLICANT: Summers, Eric
; TITLE OF INVENTION: Methods for Improving Secondary Metabolite Production in Fungi
; FILE REFERENCE: 109272.147
; CURRENT APPLICATION NUMBER: US/09/801,368
; CURRENT FILING DATE: 2001-03-07
; PRIOR APPLICATION NUMBER: US 09/487,558
; PRIOR FILING DATE: 2000-01-19
; PRIOR APPLICATION NUMBER: US 60/160,587
; PRIOR FILING DATE: 1999-10-20
; NUMBER OF SEQ ID NOS: 440
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 154
; LENGTH: 486
; TYPE: PRT
; ORGANISM: Saccharomyces cerevisiae
US-09-801-368-154

Query Match 16.8%; Score 71.5; DB 9; Length 486;

Best Local Similarity 31.7%; Pred. No. 7.1;
Matches 19; Conservative 7; Mismatches 21; Indels 13; Gaps 2;

QY 14 RAERYSKGCSAIHOKGYDFSYTGQTAALYNKAGSGVAVTRFGSSARACNP-----FGW 69
Db 391 RAARLSVCGIAAICQKRGYKTHAAGDSVYNRP-----GFKEAANALKDIYGW 441

RESULT 15
US-10-369-493-3800
; Sequence 3800, Application US/10369493
; Publication No. US20030233675A1
; GENERAL INFORMATION:
; APPLICANT: Cao, Yongwei
; APPLICANT: Hinkle, Gregory J.
; APPLICANT: Slater, Steven C.
; APPLICANT: Goldman, Barry S.
; APPLICANT: Chen, Xianfeng
; TITLE OF INVENTION: EXPRESSION OF MICROBIAL PROTEINS IN PLANTS FOR PRODUCTION OF
; TITLE OF INVENTION: PLANTS WITH IMPROVED PROPERTIES
; FILE REFERENCE: 38-10(52052)B
; CURRENT APPLICATION NUMBER: US/10/369,493
; CURRENT FILING DATE: 2003-02-28
; PRIOR APPLICATION NUMBER: US 60/360,039
; PRIOR FILING DATE: 2002-02-21
; NUMBER OF SEQ ID NOS: 47374
; SEQ ID NO 3800
; LENGTH: 557
; TYPE: PRT
; ORGANISM: Neurospora crassa
; FEATURE:
; NAME/KEY: unsure
; LOCATION: (1)..(557)
; OTHER INFORMATION: unsure at all Xaa locations
US-10-369-493-3800

Query Match 16.7%; Score 71; DB 14; Length 557;
Best Local Similarity 42.4%; Pred. No. 9.4;
Matches 14; Conservative 6; Mismatches 13; Indels 0; Gaps 0;

QY 14 RAERYSKGCSATHOKGGYDFSYTGOTAAALYNK 46
| | | | | : | | | : | | : : | |
Db 463 RAARLSACGVAAISKKKGFKQCHVGADGCVFNK 495

Search completed: November 10, 2004, 20:00:38
Job time : 105.5 secs

Result No.	Score	Query		DB	ID	Description
		Match	%			
1	73.5	17.3	486	1	US-07-872-678A-48	Sequence 48, Appl
2	73	17.1	491	4	US-09-248-796A-17049	Sequence 17049, A
3	71.5	16.8	486	4	US-08-169-613A-2	Sequence 2, Appl
4	71.5	16.8	486	4	US-08-622-191-8	Sequence 8, Appl
5	68	16.0	486	4	US-08-622-191-7	Sequence 7, Appl
6	67	15.7	115	4	US-09-252-991A-28403	Sequence 28403, A
7	66.5	15.6	585	4	US-09-620-412C-337	Sequence 337, App
8	66.5	15.6	585	4	US-09-598-419-337	Sequence 337, App
9	66.5	15.6	908	4	US-08-714-741-44	Sequence 44, Appl
10	66.5	15.6	1752	4	US-09-556-877-180	Sequence 180, App
11	66.5	15.6	1752	4	US-09-620-412C-180	Sequence 180, App
12	66.5	15.6	1752	4	US-09-598-419-180	Sequence 180, App
13	66	15.5	1576	4	US-09-562-702A-24	Sequence 24, Appl
14	66	15.5	1576	4	US-09-561-818A-24	Sequence 24, Appl
15	66	15.5	1584	4	US-09-562-702A-28	Sequence 28, Appl
16	66	15.5	1609	4	US-09-562-702A-22	Sequence 22, Appl
17	66	15.5	1609	4	US-09-561-818A-22	Sequence 22, Appl
18	66	15.5	1609	4	US-09-538-092-900	Sequence 900, App
19	66	15.5	1617	4	US-09-562-702A-26	Sequence 26, Appl
20	65.5	15.4	459	4	US-09-328-352-4648	Sequence 4648, Ap
21	65.5	15.4	861	3	US-08-960-048-12	Sequence 12, Appl
22	65.5	15.4	861	4	US-09-838-586-12	Sequence 12, Appl
23	63.5	14.9	902	1	US-08-701-846-2	Sequence 2, Appl
24	62.5	14.7	156	4	US-09-252-991A-24413	Sequence 24413, A
25	62.5	14.7	1019	1	US-08-296-014A-4	Sequence 4, Appl
26	62.5	14.7	1019	2	US-08-596-405-4	Sequence 4, Appl
27	62.5	14.7	1019	2	US-08-877-620-4	Sequence 4, Appl

Fri Nov 12 11:02:09 2004

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QY      69 W 69
Db      441 W 441

RESULT 2
US-09-248-796A-17049
; Sequence 17049, Application US/09248796A
; Patent No. 6747137
; GENERAL INFORMATION:
; APPLICANT: Keith Weinstock et al
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO CANDIDA ALBICAN
; TITLE OF INVENTION: FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 107196.132
; CURRENT APPLICATION NUMBER: US/09/248,796A
; CURRENT FILING DATE: 1999-02-12
; PRIOR APPLICATION NUMBER: US 60/074,725
; PRIOR FILING DATE: 1998-02-13
; PRIOR APPLICATION NUMBER: US 60/096,409
; PRIOR FILING DATE: 1998-08-13
; NUMBER OF SEQ ID NOS: 28208
; SEQ ID NO 17049
; LENGTH: 491
; TYPE: PRT
; ORGANISM: Candida albicans
US-09-248-796A-17049

Query Match      17.1%; Score 73; DB 4; Length 491;
Best Local Similarity 42.4%; Pred. No. 1.6;
Matches 14; Conservative 7; Mismatches 12; Indels 0; Gaps 0;

QY      14 RAERYKCGCSAIHOKGGYDFSYTGQTAALYNK 46
Db      398 RSARFSVCGIAICQKRGYKTAHCAADGVSINK 430

RESULT 3
US-08-169-613A-2
; Sequence 2, Application US/08169613A
; Patent No. 6486380
; GENERAL INFORMATION:
; APPLICANT: Epstein, Paul
; TITLE OF INVENTION: Pancreatic B Cell Hexokinase Transgene
; FILE REFERENCE: P0044US0
; CURRENT APPLICATION NUMBER: US/08/169,613A
; CURRENT FILING DATE: 1993-12-17
; NUMBER OF SEQ ID NOS: 4
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 2
; LENGTH: 486
; TYPE: PRT
; ORGANISM: yeast
US-08-169-613A-2

Query Match      16.8%; Score 71.5; DB 4; Length 486;
Best Local Similarity 31.7%; Pred. No. 2.4;
Matches 19; Conservative 7; Mismatches 21; Indels 13; Gaps 2;

QY      14 RAERYKCGCSAIHOKGGYDFSYTGQTAALYNKAGCSGVAVTRFGSSARACNP-----PCW 69
Db      391 RAARLSVCGIAICQKRGYKTHIAADGVSINRYP-----GFKEKAANALKDIYGW 441

RESULT 4
US-08-622-191-8
; Sequence 8, Application US/08622191A
; Patent No. 6632602
; GENERAL INFORMATION:
; APPLICANT: Sheen, Jen
; APPLICANT: Jang, Jyan-Chyun
; TITLE OF INVENTION: PLANT SUGAR SENSORS AND USES THEREOF
; FILE REFERENCE: 00786/307001
; CURRENT APPLICATION NUMBER: US/08/622,191A

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; CURRENT FILING DATE: 1996-03-25
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 8
; LENGTH: 486
; TYPE: PRT
; ORGANISM: Saccharomyces cerevisiae
US-08-622-191-8

Query Match      16.8%; Score 71.5; DB 4; Length 486;
Best Local Similarity 31.7%; Pred. No. 2.4;
Matches 19; Conservative 7; Mismatches 21; Indels 13; Gaps 2;

QY      14 RAERYKCGCSAIHOKGGYDFSYTGQTAALYNKAGCSGVAVTRFGSSARACNP-----PCW 69
Db      391 RAARLSVCGIAICQKRGYKTHIAADGVSINRYP-----GFKEKAANALKDIYGW 441

RESULT 5
US-08-622-191-7
; Sequence 7, Application US/08622191A
; Patent No. 6632602
; GENERAL INFORMATION:
; APPLICANT: Sheen, Jen
; APPLICANT: Jang, Jyan-Chyun
; TITLE OF INVENTION: PLANT SUGAR SENSORS AND USES THEREOF
; FILE REFERENCE: 00786/307001
; CURRENT APPLICATION NUMBER: US/08/622,191A
; CURRENT FILING DATE: 1996-03-25
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 7
; LENGTH: 486
; TYPE: PRT
; ORGANISM: Saccharomyces cerevisiae
US-08-622-191-7

Query Match      16.0%; Score 68; DB 4; Length 486;
Best Local Similarity 42.4%; Pred. No. 6.2;
Matches 14; Conservative 5; Mismatches 14; Indels 0; Gaps 0;

QY      14 RAERYKCGCSAIHOKGGYDFSYTGQTAALYNK 46
Db      391 RAARLAVCGIAICQKRGYKTHIAADGVSINK 423

RESULT 6
US-09-252-991A-28403
; Sequence 28403, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; CURRENT FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 28403
; LENGTH: 115
; TYPE: PRT
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-28403

Query Match      15.7%; Score 67; DB 4; Length 115;
Best Local Similarity 30.0%; Pred. No. 1.5;
Matches 24; Conservative 3; Mismatches 29; Indels 24; Gaps 4;

QY      2 AFTVNSGPGCNNRA-----BRYSKC-----GCSAIHQKGGYDFSYTGQTAALY 44

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Db 42 ATACWSRPTNRRCSAAWESTSRCTWFTTTATASPRNCSPAITKAG-----CGSPSPACS 96
 Qy 45 NKAGCSGVAVTRFGSSARAC 64
 Db 97 SMVCSKRRTAR--CSARSC 114

RESULT 7

US-09-620-412C-337
 ; Sequence 337, Application US/09620412C
 ; Patent No. 6448234
 ; GENERAL INFORMATION:
 ; APPLICANT: Steven P. Fling
 ; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR TREATMENT AND
 ; FILE OF INVENTION: DIAGNOSIS OF CHLAMYDIAL INFECTION
 ; FILE REFERENCE: 210121.469C7
 ; CURRENT APPLICATION NUMBER: US/09/620,412C
 ; CURRENT FILING DATE: 2000-07-20
 ; NUMBER OF SEQ ID NOS: 363
 ; SOFTWARE: FastSeq for Windows Version 3.0/4.0
 ; SEQ ID NO 337
 ; LENGTH: 585
 ; TYPE: PRT
 ; ORGANISM: Chlamydia trachomatis
 US-09-620-412C-337

Query Match 15.6%; Score 66.5; DB 4; Length 585;
 Best Local Similarity 31.6%; Pred. No. 12;
 Matches 18; Conservative 8; Mismatches 28; Indels 3; Gaps 1;

Qy 18 YSKCGCSAIHQKGYDFSYGTGTAALYNKAG---CSGVAVTRFGSSARACNPFGWKS 71
 Db 164 YSKQGGALYVEGGINFQDLEIRIKYNKAGTFETKKTLPKQAQASAGNADAWAS 220

RESULT 8

US-09-598-419-337
 ; Sequence 337, Application US/09598419
 ; Patent No. 6565856
 ; GENERAL INFORMATION:
 ; APPLICANT: Skeiky, Yasir A.W.
 ; APPLICANT: Scholler, John
 ; TITLE OF INVENTION: COMPOUNDS AND METHODS FOR TREATMENT AND
 ; FILE OF INVENTION: DIAGNOSIS OF CHLAMYDIAL INFECTION
 ; FILE REFERENCE: 210121.469C6
 ; CURRENT APPLICATION NUMBER: US/09/598,419
 ; CURRENT FILING DATE: 2000-06-20
 ; NUMBER OF SEQ ID NOS: 357
 ; SOFTWARE: FastSeq for Windows Version 3.0/4.0
 ; SEQ ID NO 337
 ; LENGTH: 585
 ; TYPE: PRT
 ; ORGANISM: Chlamydia trachomatis
 US-09-598-419-337

Query Match 15.6%; Score 66.5; DB 4; Length 585;
 Best Local Similarity 31.6%; Pred. No. 12;
 Matches 18; Conservative 8; Mismatches 28; Indels 3; Gaps 1;

Qy 18 YSKCGCSAIHQKGYDFSYGTGTAALYNKAG---CSGVAVTRFGSSARACNPFGWKS 71
 Db 164 YSKQGGALYVEGGINFQDLEIRIKYNKAGTFETKKTLPKQAQASAGNADAWAS 220

RESULT 9

US-08-714-741-44
 ; Sequence 44, Application US/08714741
 ; Patent No. 6500613
 ; GENERAL INFORMATION:
 ; APPLICANT: Briles, David E.
 ; APPLICANT: McDaniel, Larry S.
 ; APPLICANT: Swiatlo, Edwin

; APPLICANT: Yother, Janet
 ; APPLICANT: Crain, Marilyn J.
 ; APPLICANT: Hollingshead, Susan
 ; APPLICANT: Tart, Rebecca
 ; APPLICANT: Brooks-Walter, Alexis
 ; TITLE OF INVENTION: PNEUMOCOCCAL GENES, PORTIONS THEREOF,
 ; TITLE OF INVENTION: EXPRESSION PRODUCTS THEREFROM, AND USES OF SUCH GENES,
 ; TITLE OF INVENTION: PORTIONS AND PRODUCTS
 ; NUMBER OF SEQUENCES: 47
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Curtis, Morris & Safford, P.C.
 ; STREET: 530 Fifth Avenue
 ; CITY: New York
 ; STATE: New York
 ; COUNTRY: U.S.
 ; ZIP: 10036

COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: PatentIn Release #1.0, Version #1.30
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/714,741
 ; FILING DATE: 16-SEP-1996
 ; CLASSIFICATION: 435
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Frommer, Beq., William S.
 ; REGISTRATION NUMBER: 25,506
 ; REFERENCE/DOCKET NUMBER: 454312-2460
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: (212) 840-3333
 ; TELEFAX: (212) 840-0712
 ; INFORMATION FOR SEQ ID NO: 44:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 908 amino acids
 ; TYPE: amino acid
 ; STRANDEDNESS: single
 ; TOPOLOGY: linear
 ; MOLECULE TYPE: DNA (genomic)
 US-08-714-741-44

Query Match 15.6%; Score 66.5; DB 4; Length 908;
 Best Local Similarity 34.4%; Pred. No. 19;
 Matches 22; Conservative 6; Mismatches 33; Indels 3; Gaps 2;

Qy 1 SAFTVWSGPGCNRAERYSKGCSAIHQKGYDFSYGTGTAALYNKAGCSGVAVTRFGSS 60
 Db 249 AAAAATTAAGC--AAGCAAAGCGAAAGTTGAGAGCTGCTAAA-AAAGCTGAATTAGAAA 305

Qy 61 ARAC 64

Db 306 AAAC 309

RESULT 10

US-09-556-877-180
 ; Sequence 180, Application US/09556877
 ; Patent No. 6432916
 ; GENERAL INFORMATION:
 ; APPLICANT: Probst, Peter
 ; APPLICANT: Bhatia, Ajay
 ; APPLICANT: Skeiky, Yasir
 ; APPLICANT: Fling, Steve
 ; APPLICANT: Maisonneuve, Jeff

; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR TREATMENT AND
 ; FILE OF INVENTION: DIAGNOSIS OF CHLAMYDIAL INFECTION
 ; FILE REFERENCE: 210121.469C5
 ; CURRENT APPLICATION NUMBER: US/09/556,877
 ; CURRENT FILING DATE: 2000-04-19
 ; NUMBER OF SEQ ID NOS: 305
 ; SOFTWARE: FastSeq for Windows Version 3.0/4.0
 ; SEQ ID NO 180
 ; LENGTH: 1752


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; APPLICANT: Yurchenco, Peter
; TITLE OF INVENTION: Laminin 2 and Methods for Its Use
; FILE REFERENCE: 99-274-B
; CURRENT APPLICATION NUMBER: US/09/562,702A
; CURRENT FILING DATE: 2000-04-28
; PRIOR APPLICATION NUMBER: 60/155,945
; PRIOR FILING DATE: 1999-09-24
; PRIOR APPLICATION NUMBER: 60/143,289
; PRIOR FILING DATE: 1999-07-12
; PRIOR APPLICATION NUMBER: 60/139,198
; PRIOR FILING DATE: 1999-06-15
; PRIOR APPLICATION NUMBER: 60/131,720
; PRIOR FILING DATE: 1999-04-30
; NUMBER OF SEQ ID NOS: 32
; SOFTWARE: Patent In Ver. 2.0
; SEQ ID NO 28
; LENGTH: 1584
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-562-702A-28
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Query Match      15.5%; Score 66; DB 4; Length 1584;
Best Local Similarity 26.6%; Pred. No. 42;
Matches 21; Conservative 6; Mismatches 40; Indels 12; Gaps 3;

QY      3 FTWVGPGGNNRAERYKCGCSAIHQKGGYDFSYTQGTAAALYNKAG--CSGVAVTRFGSS 60
Db      : : : : : : : : : : : : : : : : : : : : : : : : : : : :
      891 YNLQSGGCG-----ERCDCHALGSTNGQCDIRTGQCECPGTTGHCERCCEVNHFGFG 943

QY      61 ARACNPFGWK---SIFIOC 76
Db      : : : : : : : : : : : : : : : : : : : : : :
      944 PEGCKPCDCHPGGSUSLQC 962
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Job time : 29 secs

